

CLAIMS

1. An engine balancer system having a balancer housing (17) formed by joining an upper housing (29) and a lower housing (30) via mating faces (P), the balancer housing (17) being disposed so as to face an oil pan (15) beneath a crankshaft (20) of an engine (E), and the balancer housing (17) being inclined so that the height of the mating faces (P) varies from one side to the other, wherein oil discharge holes (45a to 45d, 46) for discharging oil that is within the balancer housing (17) are formed in the mating faces (P) on the higher side of the balancer housing (17) and in the upper housing (29) above the mating faces (P) on the lower side of the balancer housing (17).
2. The engine balancer system according to Claim 1, wherein an angle (θ_2) between the lower housing (30) and the mating faces (P) on the lower side of the balancer housing (17) is larger than an angle (θ_1) formed between the lower housing (30) and the mating faces (P) on the higher side of the balancer housing (17).
3. The engine balancer system according to either Claim 1 or Claim 2, wherein the engine (E) is mounted transversely with the crankshaft (20) disposed along the lateral direction of a vehicle body, the higher side of the balancer housing (17) faces the rear of the vehicle body, and the lower side of the balancer housing (17) faces the front of the vehicle body.
4. The engine balancer system according to any one of Claim 1 to Claim 3, wherein a baffle plate (48) extending from a position lower than the mating faces (P) to a higher position is provided in the lower housing (30) on the higher side of the balancer housing (17).
5. The engine balancer system according to Claim 1, wherein the engine (E) is mounted transversely with the crankshaft (20) disposed in the lateral

direction of a vehicle body, the lower side of the balancer housing (17) faces the rear of the vehicle body, and the higher side of the balancer housing (17) faces the front of the vehicle body.

6. The engine balancer system according to Claim 1, wherein the position
5 of an oil outlet (14b) at the lower end of an oil return passage (14a) formed in
an engine block (14) and the position of the oil discharge hole (45a to 45d) of
the balancer housing (17) are displaced from each other.

7. The engine balancer system according to Claim 6, wherein the oil
discharge hole (45a to 45d) of the balancer housing (17) is covered by a baffle
10 plate (47, 49), and the oil outlet (14b) of the oil return passage (14a) is
disposed at a position that avoids the baffle plate (47, 49).

8. The engine balancer system according to Claim 7, wherein an escape
section (47a, 49d) is formed in the baffle plate (47, 49), the escape section
(47a, 49d) letting the oil discharged via the oil outlet (14b) of the oil return
15 passage (14a) escape.

9. The engine balancer system according to Claim 8, wherein the escape
section (47a, 49d) is formed between fastening parts (32, 50) via which the
baffle plate (47, 49) is secured.

10. The engine balancer system according to Claim 9, wherein an edge of
20 the escape section (47a, 49d) of the baffle plate (47, 49) is bent downward.